What is claimed is:

1. A guide wire comprising:

an elongate, flexible core having a proximal region, a proximal end, a distal region, and a distal end, and the distal region having a tapered portion;

a plurality of wire strands wrapped helically parallel to one another and disposed on at least a portion of the tapered distal region of the core;

a polymer tie layer disposed on at least a portion of the plurality of wire strands; and

a lubricious polymer layer disposed on the polymer tie layer.

2. A guide wire of claim 1, wherein the polymer tie layer is disposed on the entire distal end of the guide wire.

3. A guide wire of claim 1, wherein the guide wire further comprises a coil disposed at the distal end.

4. A guide wire of claim 3, wherein at least a portion of the coil is not covered by the polymer tie layer.

5. A guide wire of claim 1, wherein the guide wire further comprises a radiopaque tip disposed at the distal end.

6. A guide wire of claim 5, wherein the radiopaque tip comprises a polymer containing radiopaque material.

7. A guide wire of claim 1, wherein the polymer tie layer provides the only form of attachment between the plurality of wire strands and the core.

8. A guide wire of claim 1, wherein the plurality of wire strands are attached to the core by one or more solders, welds, swaging tubes, or adhesives.

9. A guide wire of claim 1, wherein the guide wire has a distal end and the core extends to the distal end of the guide wire.

10. A guide wire of claim 1, wherein the guide wire has a distal end and the core does not extend to the distal end of the guide wire.

11. A guide wire of claim 1, wherein the plurality of wire strands has a distal end and the core extends past the distal end of the plurality of wire strands.

12. A guide wire of claim 1, wherein the length of the guide wire is from 30 to 350 cm.

13. A guide wire of claim 1, wherein the length of the guide wire is from 150 to 320 cm.

14. A guide wire of claim 1, wherein the guide wire has an outer diameter of from 0.005 to 0.038 inch.

15. A guide wire of claim 1, wherein the guide wire comprises 3 to 24 wire strands.

16. A guide wire of claim 1, wherein the guide wire comprises 5 to 8 wire strands.

17. A guide wire of claim 1, wherein the wires forming the plurality of wire strands have lengths of from 1 to 80 cm.

18. A guide wire of claim 1, wherein the wires forming the plurality of wire strands have outer diameters of from 0.001 to 0.010 inch.

19. A guide wire of claim 1, wherein the tapered distal region of the core has a length of from 5 to 80 cm.

20. A guide wire of claim 1, wherein the plurality of wire strands wrapped helically parallel to one another form a stranded tubular structure having a longitudinal central axis, and wherein at least a portion of the tapered distal region of the core is disposed within the stranded tubular structure.

21. A guide wire of claim 20, wherein the angle between the wire strands and the central longitudinal axis is from 10 to 45 degrees.

22. A guide wire of claim 21, wherein the angle between the wire strands and the central longitudinal axis is from 15 to 30 degrees.

23. A guide wire of claim 20, wherein the entire core is disposed within the stranded tubular structure.

24. A guide wire comprising:

an elongate, flexible core having a proximal region, a proximal end, a distal region, and a distal end, and the distal region having a tapered portion;

a plurality of wire strands wrapped helically parallel to one another and disposed on at least a portion of the tapered distal region of the core; and

a polymer tie layer disposed on at least a portion of the plurality of wire strands,

wherein the polymer tie layer provides the only form of attachment between the plurality of wire strands and the core.

25. A guide wire of claim 24, wherein the polymer tie layer is disposed on the entire distal end of the guide wire.

26. A guide wire of claim 24, wherein the guide wire further comprises a coil disposed at the distal end.

27. A guide wire of claim 26, wherein at least a portion of the coil is not covered by the polymer tie layer.

28. A guide wire of claim 24, wherein the guide wire further comprises a radiopaque tip disposed at the distal end.

29. A guide wire of claim 28, wherein the radiopaque tip comprises a polymer containing radiopaque material.

30. A guide wire of claim 24, wherein the guide wire has a distal end and the core extends to the distal end of the guide wire.

31. A guide wire of claim 24, wherein the guide wire has a distal end and the core does not extend to the distal end of the guide wire.

32. A guide wire of claim 24, wherein the plurality of wire strands has a distal end and the core extends past the distal end of the plurality of wire strands.

33. A guide wire of claim 24, wherein the length of the guide wire is from 30 to 350 cm.

34. A guide wire of claim 24, wherein the length of the guide wire is from 150 to 320 cm.

35. A guide wire of claim 24, wherein the guide wire has an outer diameter of from 0.005 to 0.038 inch.

36. A guide wire of claim 24, wherein the guide wire comprises 3 to 24 wire strands.

37. A guide wire of claim 24, wherein the guide wire comprises 5 to 8 wire strands.

38. A guide wire of claim 24, wherein the wires forming the plurality of wire strands have lengths of from 1 to 80 cm.

39. A guide wire of claim 24, wherein the wires forming the plurality of wire strands have outer diameters of from 0.001 to 0.010 inch.

40. A guide wire of claim 24, wherein the tapered distal region of the core has a length of from 5 to 80 cm.

41. A guide wire of claim 24, wherein the plurality of wire strands wrapped helically parallel to one another form a stranded tubular structure having a longitudinal central axis, and wherein at least a portion of the tapered distal region of the core is disposed within the stranded tubular structure.

42. A guide wire of claim 41, wherein the angle between the wire strands and the central longitudinal axis is from 10 to 45 degrees.

43. A guide wire of claim 42, wherein the angle between the wire strands and the central longitudinal axis is from 15 to 30 degrees.

44. A guide wire of claim 41, wherein the entire core is disposed within the stranded tubular structure.

45. A guide wire comprising:

an elongate, flexible core having a proximal region, a proximal end, a distal region, and a distal end, the distal region having a tapered portion, and the tapering region terminating in an enlarged diameter portion;

a plurality of wire strands wrapped helically parallel to one another and disposed on at least a portion of the tapered distal region of the core;

a polymer tie layer disposed on at least a portion of the plurality of wire strands; and

a lubricious polymer layer disposed on the polymer tie layer.

46. A guide wire comprising:

an elongate, flexible core having a proximal region, a proximal end, a distal region, and a distal end, and the distal region having a tapered portion;

a plurality of wire strands wrapped helically parallel to one another and disposed on at least a portion of the tapered distal region of the core; and

a polymer tie layer disposed on at least a portion of the plurality of wire strands,

wherein the core comprises at least two separate members.

47. A guide wire of claim 46, wherein at least two of the separate members overlap.

48. A guide wire comprising:

an elongate, flexible core having a proximal region, a proximal end, a distal region, and a distal end;

a plurality of wire strands wrapped helically parallel to one another and disposed distal to the distal end of the elongate, flexible core; and

a polymer tie layer disposed on at least a portion of the plurality of wire strands and at least a portion of the elongate, flexible core.

49. A guide wire comprising:

an elongate, flexible core having a proximal region, a proximal end, a distal region, and a distal end, and the distal region having a tapered portion;

a plurality of wire strands wrapped helically parallel to one another and disposed on the core, and

wherein the plurality of wire strands wrapped helically parallel to one another form a stranded tubular structure having a longitudinal central axis, and wherein the entire core is disposed within the stranded tubular structure.